Safe Asset Demand

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Motivation

- **Convenience yields** are **high** despite
  1. **High** Treasury Supply (Krishnamurthy Vissing-Jorgensen 2012)
  2. **Low** Real Rates (Nagel 2016)
- **Corporates** ownership share of **treasuries** have been **increasing** over the last two decades
- **Corporate managers** are exposed to **idiosyncratic risk** through **performance based pay**, increasing **safe asset demand**.

Abstract

I show the new fact that Idiosyncratic volatility significantly predicts the convenience yield. This fact is poses a puzzle with current safe asset theories. I develop a new theory that reconciles this puzzle - a theory I label Safe Asset Demand. Safe Asset Demand explains 29% of future convenience yield variation and is verified in the cross-section of firm treasury holdings. I show that when managers are exposed to moral hazard, corporate demand will be determined by their idiosyncratic risk. I isolate my demand-based effect from confounders by using exogenous cross-sectional variation from corporate size and industry exposures. The results provide support for the importance of corporates as an investor class.

Theoretical Framework

The manager maximises:

$$U(w, a) = \mathrm{E}[1 - e^{-Aw + a^2}], \quad (1)$$

where A describes the agents degree of risk aversion, and a his effort level. Secondly, let the investment technology available be equal to $\sqrt{k}$.

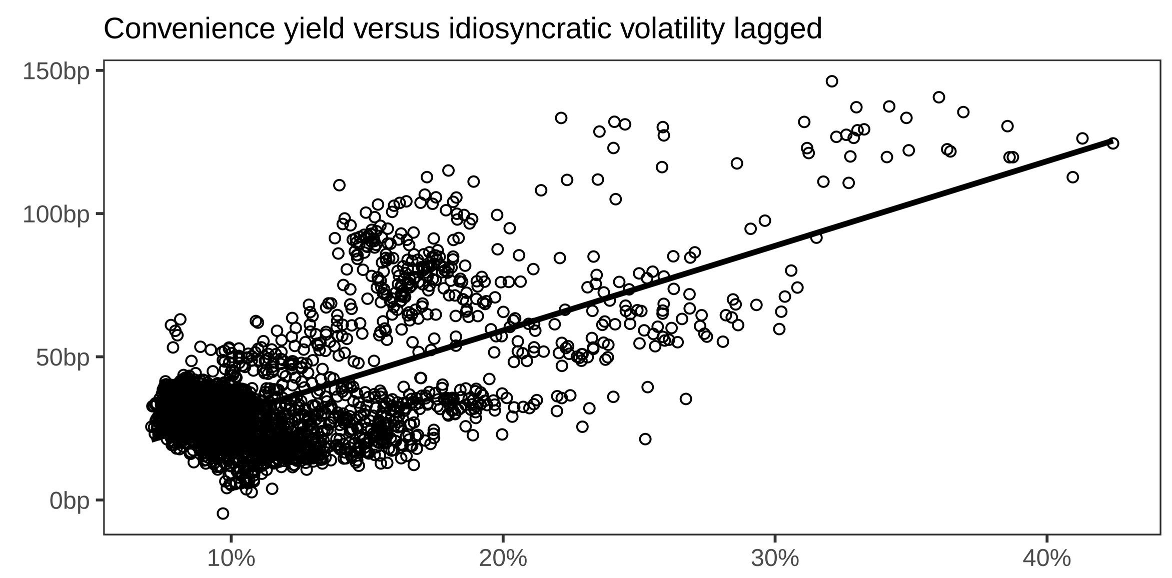
In equilibrium

$$R^c \propto \frac{1}{2} A \sigma_i^2, \quad (2)$$

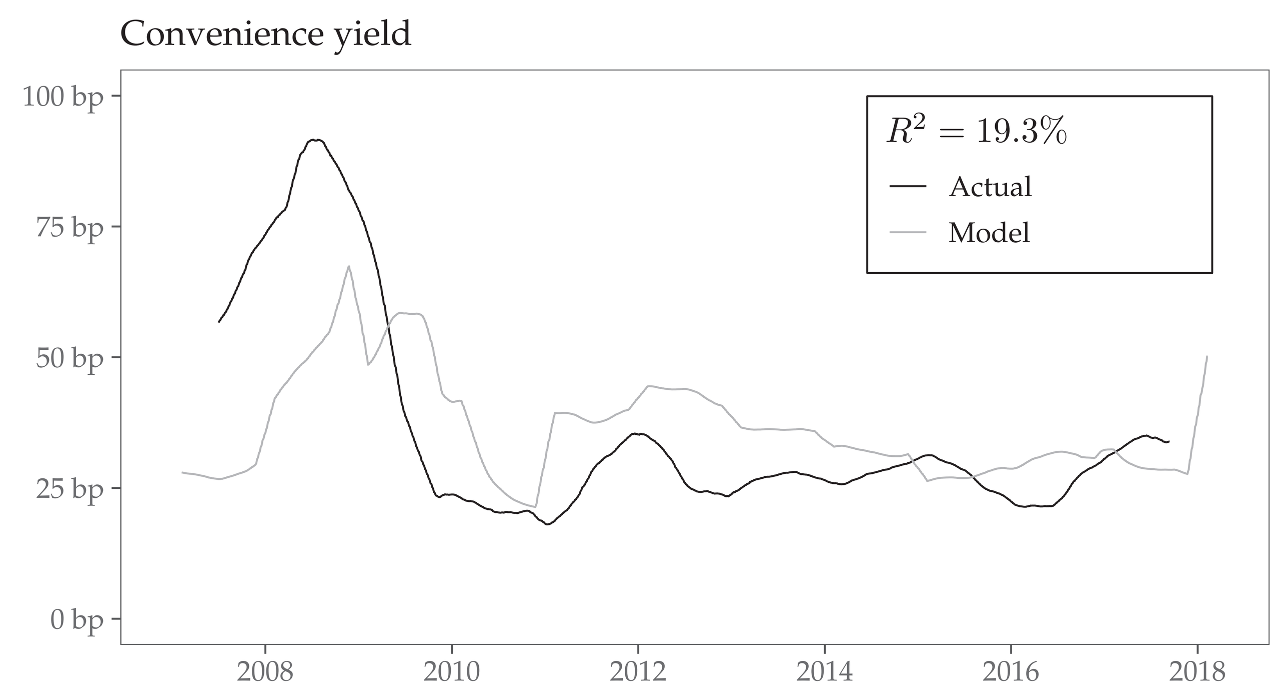
where σ_i is idiosyncratic risk.

Results

- Corporates idiosyncratic risk predicts convenience yields.



- Follows well in the time-series



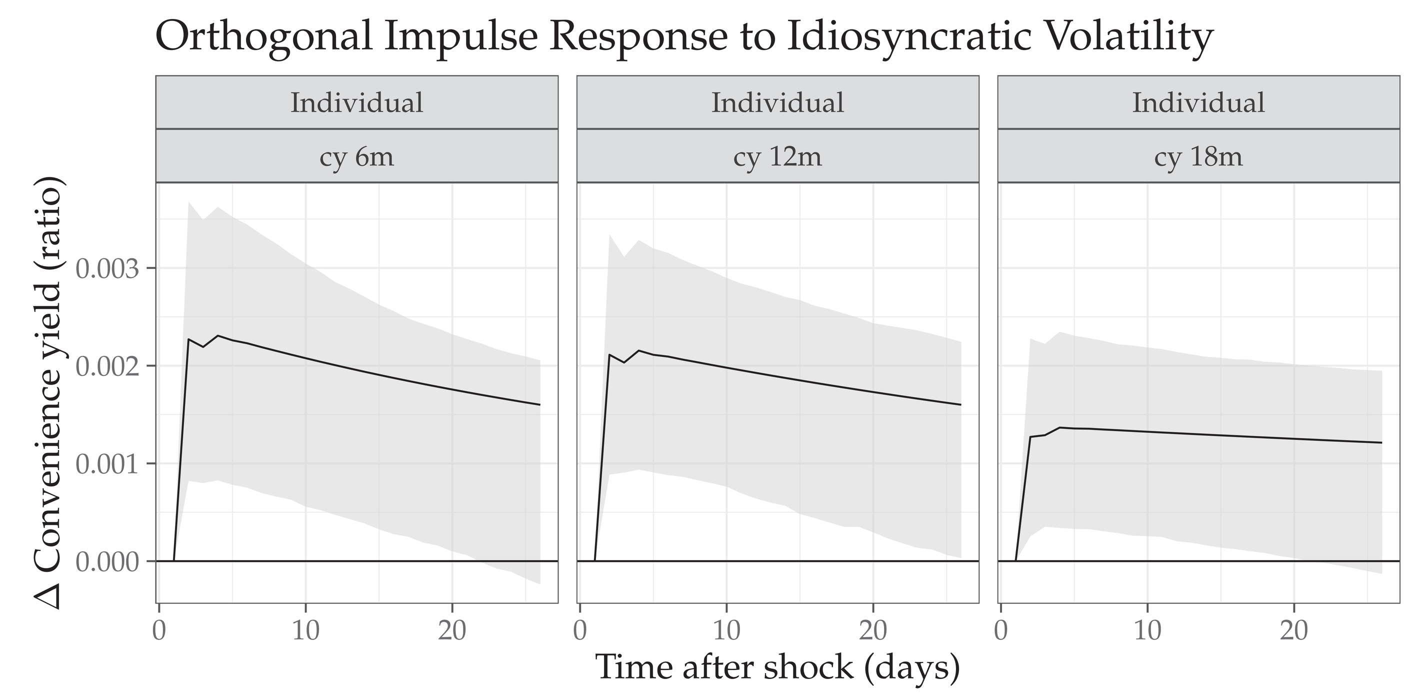
- And cross-section, also using exogenous variation from Industry Exposures of Alfaro (2021)

	Saving, S(t)/A(t-1)			Investment, K(t)/A(t-1)		
	OLS	IV		OLS	IV	
	(1)	(2)	(3)	(4)	(5)	(6)
IVol(t-1)	0.09***	1.25**	1.18**	-0.01*	-1.33***	-1.21***
	[4.08]	[2.56]	[1.97]	[-1.76]	[-5.65]	[-3.93]
N	19448	19448	19448	19552	19552	19550
1st Moment 10IV(t-1)			✓			✓
Firm FE	✓	✓	✓	✓	✓	✓
Year FE	✓	✓	✓	✓	✓	✓
F 1st stage	18.3	18.3	18.3	18.3	18.3	18.3

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Effect is Long Lasting

- VAR setup shows long-lasting effects.



References

Krishnamurthy, A., Vissing-Jorgensen, A. (2012). The Aggregate Demand for Treasury Debt. Journal of Political Economy, 120(2), 233–267.

Nagel, S. (2016). The Liquidity Premium of Near-Money Assets. The Quarterly Journal of Economics, 131(4), 1927–1971.

Alfaro, I., Bloom, N., Lin, X. (2021). The Finance Uncertainty Multiplier. Journal of Political Economy, Revise and Resubmit.

Conclusion

1. I have shown importance of **corporates** driving **safe asset demand**
2. Understanding who is **marginal investor** in which **asset classes** is **promising** avenue to pursue
3. I provide **highly tractable framework** that can be **easily extended** to other asset classes.